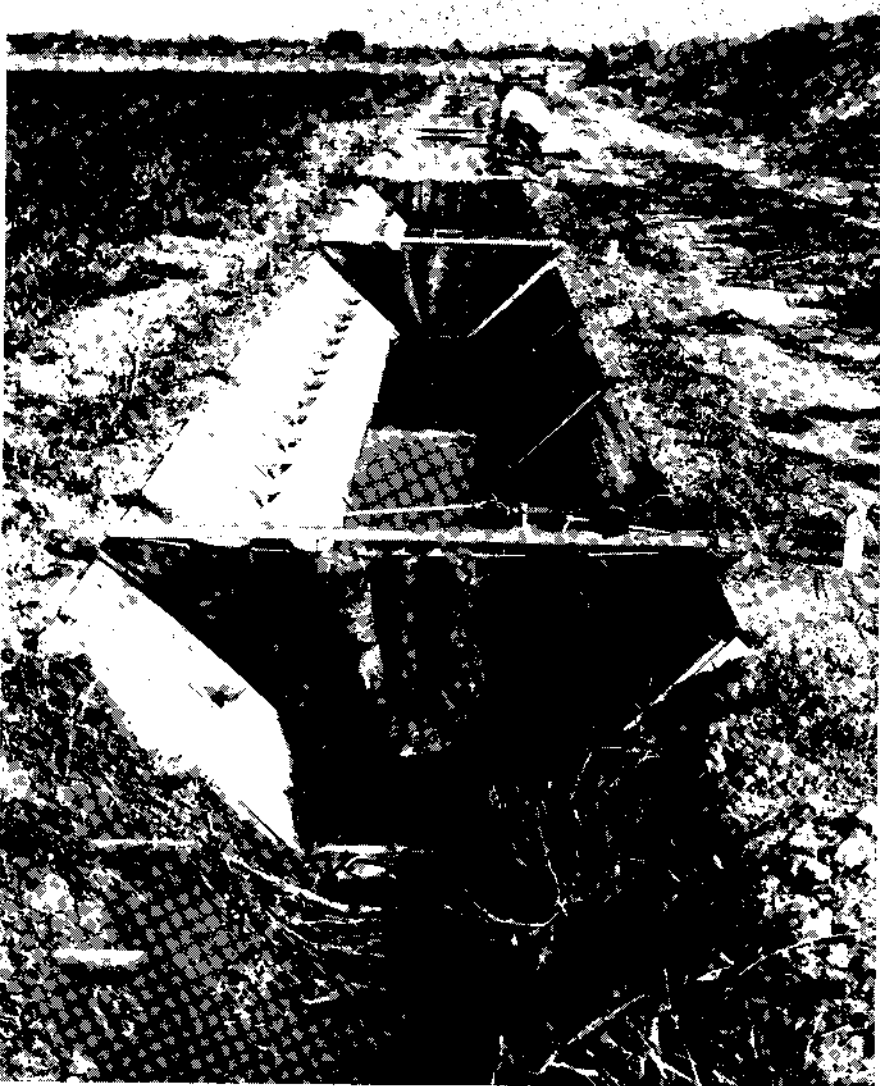


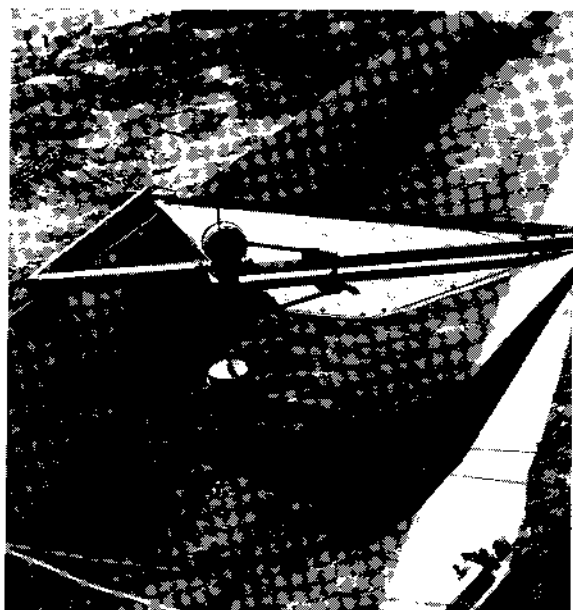
Butyl dams drop when timers release nylon drawstrings. For unlined ditches, scientists at the USDA's Snake River Cons. Res. Ctr., Kimberly, Idaho, are testing two more models. One has a metal cutoff wall around the butyl; the other is built like a portable canvas dam.

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3 automatic check dams

Scientists are trying new surface irrigation equipment that lets you save on labor. Floats start pre-set timers that trip dams after irrigation runs are complete. All you do is set the dams and turn in the water

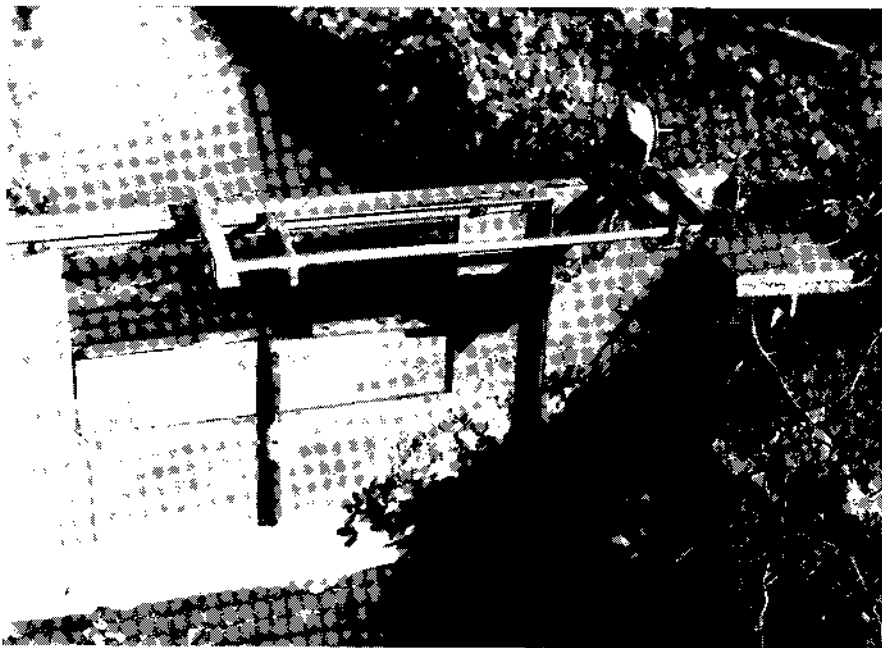


Photos: USDA—ARS

Metal drop check swings down to stop water flow in the ditch. It's handy for diverting water from one ditch to another; can be tripped by a timer or by a signal from the lower end of the ditch, says Allan S. Humpherys, USDA agricultural engineer.

←

Metal flap gate mounts on a regular steel cutoff wall. A timer releases a latch to open it. You can reset the flap gate or the butyl dam (above) anytime between irrigations; the timer doesn't start until water flows up against the dam and lifts a float.



HOME-MADE AND HANDY.®

More than triples storage space for tools. Plywood rack rolls on casters. Rotate it to find type of tools you need, then roll it into a corner out of the way. Base is 2x4s and $\frac{3}{4}$ " plywood; sides are $\frac{1}{2}$ " plywood. Glenn Hookom, Henry County, Iowa.

Photo: A. M. Wetach

Carries power where you need it. Trailer's standard-width wheels track behind pickup. Transports 220-volt generator to run welder, electric branding iron, tools. When towing, you detach the pivot wheel. Jim Hoover, Ottawa County, Kansas.

Photo: Chester Peterson, Jr.

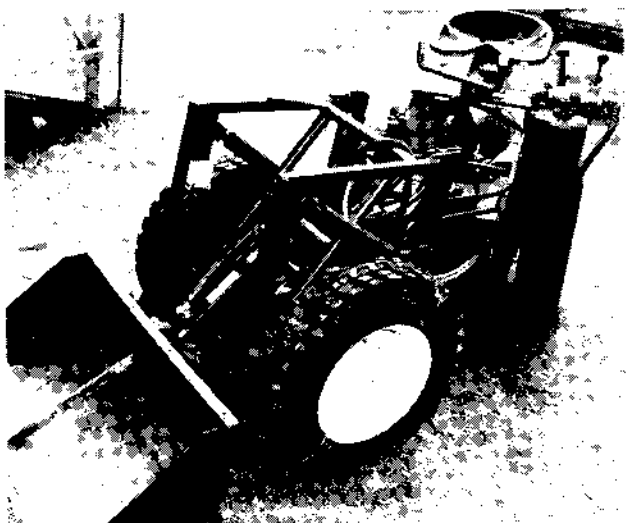
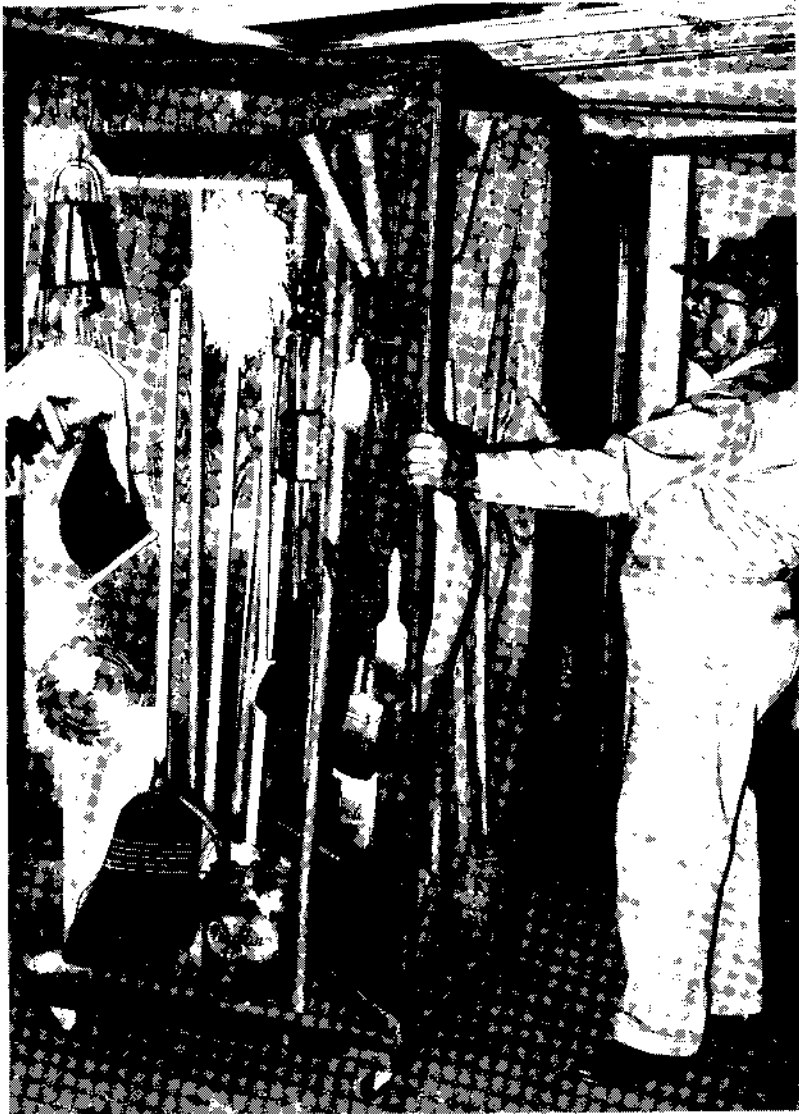
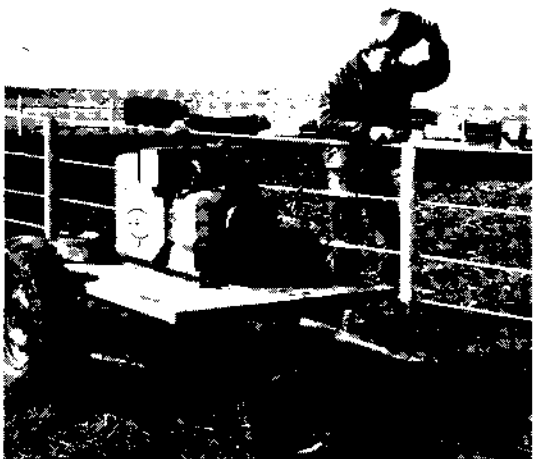


Photo: A. M. Wetach

4-wheel-drive loader scoops up 700 lbs. George Yaley, Black Hawk County, Iowa, coupled a pair of car differentials with two universal joints which swing like door hinges. The $7\frac{1}{2}$ -hp. engine also runs hydraulic pump. Unit squeezes through a 40" space to clean out pens.

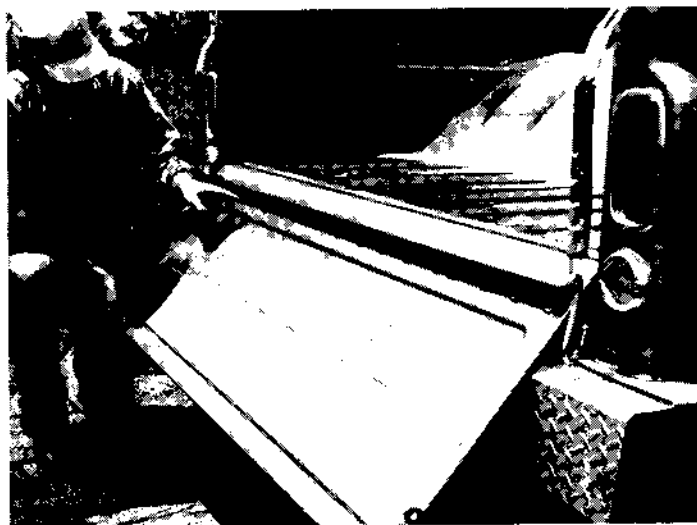


Photo: C. F. Marley

Angle iron seals and braces endgate against bulging from grain and livestock pressure. Close endgate, cut angle iron to right length, fit it snugly to where endgate and truck bed meet, and weld it to endgate. Helps prevent small grain from leaking through. C. F. Marley, Shelby County, Illinois.